DEPARTMENT OF TRANSPORTATION

ESC/OE MS #43 1737 30TH. Street 2ND. Floor SACRAMENTO, CA 945816



July 7, 1999

04-SF-80-5.5/7.8 04-0435U4

Addendum No. 1

Dear Contractor:

This addendum is being issued to the contract for construction on State highway in THE CITY AND COUNTY OF SAN FRANCISCO AT SAN FRANCISCO-OAKLAND BAY BRIDGE FROM 0.2 MILE WEST OF SAN FRANCISCO ANCHORAGE TO EAST END OF YERBA BUENA TUNNEL.

Submit bids for this work with the understanding and full consideration of this addendum. The revisions declared in this addendum are an essential part of the contract.

Bids for this work will be opened on August 10, 1999.

This addendum is being issued to revise the Notice to Contractors and Special Provisions.

In the Special Provisions, Section 2-1.08, "Escrow of Bid Documentation" is added as attached.

In the Special Provisions, Section 5-1.005, "Contract Bonds", the second paragraph is revised as follows:

"Each of the two bonds required in Section 3-1.02, "Contract Bonds", of the Standard Specifications shall be in a sum equal to 100 percent of the contract price."

In the Special Provisions, Section 5-1.17, "Partnering" is revised as attached.

In the Special Provisions, Section 5-1.21, "Payments" the following paragraph is added after the first paragraph:

"For the purpose of making partial payments pursuant to Section 9-1.06, "Partial Payments," of the Standard Specifications, the amount set forth for the contract items of work hereinafter listed shall be deemed to be the maximum value of said contract item of work which will be recognized for progress payment purposes.

Electronic Mobile Daily Diary System Data Delivery \$32,000"

In the Special Provisions, Section 5-1.22, "Sound Control Requirements" is revised as attached.

In the Special Provisions, Section 5-1.36, "Navigation Requirements" the third paragraph is revised as follows:

"When working on, adjacent to or affecting navigable waters, the Contractor shall provide to the Resident Engineer and monitor not less than one marine radiotelephone capable of transmitting and receiving on Channels 13 and 16, and shall provide maintain and operate such lights, signals and other warning devices as may be required by the District Commandant of the USCG."

In the Special Provisions, Section 10-1.01, "Order of Work", is revised as attached.

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In the Special Provisions, Section 10-1.03, "Water Pollution Control", subsection "Payment", the first sentence of the fourth paragraph is revised as follows:

"Changes in control measures required by an approved amendment to the SWPPP as a result of extra work added to the contract will be considered extra work, in accordance with Section 4-1.03D of the Standard Specifications and the following:"

In the Special Provisions, Section 10-1.05, "Progress Schedule (Critical Path)", is revised as attached.

In the Special Provisions, Section 10-1.06, "Electronic Mobile Daily Diary System Data Delivery", is revised as attached.

In the Special Provisions, Section 10-1.12, "Maintaining Traffic", subsection "Closure Requirements and Conditions," under title, "Additions and Cancellations", the following sentence is added after the second sentence of the second paragraph:

"No lane closure will be allowed on December 31, 1999, January 1, 2000, and January 2, 2000"

In the Special Provisions, Section 10-1.12, "Maintaining Traffic", subsection "Denial of Previously Requested or Approved Lane Closures," under title, "Terminated Closures", the fourteenth paragraph is revised as follows:

"Designated holidays for the purpose of determining allowable lane closure hours are: January 1st, January 2, 2000, the third Monday in February, the last Monday in May, July 4th, the first Monday in September, Thanksgiving Day, the day after Thanksgiving day, December 25th and December 31, 2000. When a designated holiday falls on a Sunday, the following Monday shall be a designated holiday."

In the Special Provisions, Section 10-1.13, "Traffic Control System for Lane Closure," the following sentence is added to the end of the sixteenth paragraph:

"Each lane closure shall be considered as one unit from installation to pick up of the lane closure as allowed within the time as shown in the lane closure charts."

In the Special Provisions, Section 10-1.13, "Traffic Control System for Lane Closure," the first sentence of the seventeenth paragraph is revised as follows:

"The adjustment provisions in Section 4-1.03B(1) and 4-1.03B(2) of the Standard Specifications, shall not apply to the items of traffic control system and lane closure items."

In the Special Provisions, Section 10-1.15, "Barrier Truck," the first sentence of the eighth paragraph is revised as follows:

"Truck-mounted crash cushions (TMCC) shall be any of the following approved models, or equal:"

In the Special Provisions, Section 10-1.22, "Existing Highway Facilities," subsection, "Safety and Health Provisions," the last sentence of the third paragraph is revised as follows:

"Copies of all air monitoring or jobsite inspection reports made by or under the direction of the CIH in accordance with Section 1532.1, "Lead," shall be furnished to the Engineer within 5 days after date of monitoring or inspection."

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In the Special Provisions, Section 10-1.22, "Existing Highway Facilities," the following paragraphs are added after the fourth paragraph of subsection "Debris Handling":

"SAMPLING AND ANALYSIS.—The Contractor shall take the air and soil samples as required in these special provisions. A qualified person shall collect the samples. The Contractor shall submit for approval by the Engineer, his sampling and analysis procedure and the name and address of the laboratory to be used fifteen working days prior to beginning any sampling or analysis. The laboratory used shall be certified by the California Department of Health Services.

Full compensation for sampling and analysis shall be considered as included in the prices paid for various contract items of work and no additional compensation will be allowed therefor."

In the Special Provisions, Section 10-1.22B, "Relocate Miscellaneous Facilities", is revised as attached.

In the Special Provisions, Section 10-3.04, "Cost Break-Down", the fifth paragraph is revised as follows:

"The cost break-down shall be submitted to the Engineer for acceptance within 20 days after the contract has been approved. The cost break-down shall be used by the Engineer to make any partial payment for the items of electrical work."

In the Special Provisions, Section 10-3.05, "Equipment List and Drawings", the second paragraph is revised as follows:

"The Contractor shall submit within 15 working days prior to beginning of work in certain areas as depicted in the plans, a complete list of equipment which he/she proposes to install, manufacturer's catalog information, shop drawings and such other data as required by the Engineer."

In the Special Provisions, Section 10-3.08B, "Telephone Cable", the last sentence of the fifth paragraph is revised as follows:

"Note that distances between some splice boxes will be at least 2,300 feet."

In the Special Provisions, Section 10-3.19, "15 KV Cable, 15 KV Splice Box, Cable Tray and Supports", subsection "5 KV Power Cable" under title "Terminating" the first sentence of the fifth paragraph is revised as follows:

"All proposed termination and splice methods and equipment shall be submitted to the Engineer for approval 15 working days before work may begin."

To Proposal and Contract book holders:

- ATTACHED ARE COPIES OF THE MATERIAL INFORMATION FOR ACOUSTICAL BLANKETS/SOUND ATTENUATION MATERIALS.
- INDICATE RECEIPT OF THIS ADDENDUM BY FILLING IN THE NUMBER OF THIS ADDENDUM IN THE SPACE PROVIDED ON THE SIGNATURE PAGE OF THE PROPOSAL.
- Submit bids in the Proposal and Contract book you now possess. Holders who have already mailed their book will be contacted to arrange for the return of their book.
- Inform subcontractors and suppliers as necessary.

This office is sending this addendum by UPS overnight mail to Proposal and Contract book holders to ensure that each receives it.

If you are not a Proposal and Contract book holder, but request a book to bid on this project, you must comply with the requirements of this letter before submitting your bid.

Sincerely,

ORIGINAL SIGNED BY

NICK YAMBAO, Chief Plans, Specifications & Estimates Branch Office of Office Engineer

Attachments

2-1.08 ESCROW OF BID DOCUMENTATION

Bid documentation shall consist of all documentary and calculated information generated by the Contractor in preparation of the bid. The bid documentation shall conform to the requirements in these special provisions, and shall be submitted to the Department and held in escrow for the duration of the contract.

In the resolution of disputes involving the project, the escrowed bid documents will be the only documents accepted from the Contractor regarding preparation of the bid.

In signing the proposal, the bidder certifies that the material submitted for escrow constitutes all the documentary information used in preparation of the bid and that he has personally examined the contents of the container and that they are complete.

The bidder shall include with the proposal, the identification of the bidder's representative authorized to present the bid documentation and the persons responsible for preparing the bidder's estimate.

Nothing in the bid documentation shall be construed to change or modify the terms or conditions of the contract.

Escrowed bid documentation will not be used for pre-award evaluation of the Contractor's anticipated methods of construction, nor to assess the Contractor's qualifications for performing the work.

Bid documentation shall clearly itemize the Contractor's estimated costs of performing the work. The documentation submitted shall be complete and so detailed as to allow for an in-depth analysis of the Contractor's estimate.

The bid documentation shall include, but not be limited to: quantity takeoffs; rate schedules for the direct costs and the time and nontime-related indirect costs for labor (by craft), plant and equipment ownership and operation, permanent and expendable materials, insurance and subcontracted work; estimated construction schedules, including sequence and duration and development of production rates; quotations from subcontractors and suppliers; estimates of field and home office overhead; contingency and margin for each contract item of work; and other reports, calculations and information used by the bidder to arrive at the estimate submitted with the proposal.

The Contractor shall also submit bid documentation for each subcontractor whose total subcontract exceeds \$250,000. Subcontractor bid documentation shall be enclosed with the Contractor's submittal. The examination of subcontractors' bid documentation will be accomplished in the same manner as for the Contractor's bid documentation. If a subcontractor is replaced, bid documentation for the new subcontractor shall be submitted for review and escrow before authorization for the substitution will be granted. Upon request of a subcontractor, the bid documentation from that subcontractor shall be reviewed only by the subcontractor and the Department.

If the bidder is a joint venture, the bid documentation shall include the joint venture agreement, the joint venture estimate comparison and final reconciliation of the joint venture estimate.

Copies of the proposals submitted by the first, second and third low bidders will be provided to the respective bidders for inclusion in the bid documentation to be escrowed.

The first, second, and third apparent low bidders shall present the bid documentation for escrow at the District 04 Office, 111 Grand Avenue, Room 12-816, Oakland, CA, on the first Monday, at 1:00 p.m.., following the time indicated in the "Notice to Contractors" for the opening of bids.

Bid documentation shall be submitted in a sealed container, clearly marked with the bidder's name, date of submittal, project contract number and the words, "Bid Documentation for Escrow."

Failure to submit the actual and complete bid documentation as specified herein within the time specified shall be cause for rejection of the proposal.

Upon submittal, the bid documentation of the apparent low bidder will be examined and inventoried by the duly designated representatives of the Contractor and the Department to ensure that the bid documentation is authentic, legible, and in accordance with the terms of this section "Escrow of Bid Documentation." The examination will not include review of, nor will it constitute approval of, proposed construction methods, estimating assumptions or interpretation of the contract. The examination will not alter any conditions or terms of the contract. The acceptance or rejection by the Department that the submitted bid documents are in compliance with this section "Escrow of Bid Documentation" shall be completed within 48 hours of the time the bid documentation is submitted by the Contractor.

At the completion of the examination, the bid documents will be sealed and jointly deposited at an agreed commercial bank.

Bid documentation submitted by the second and third apparent low bidders will be jointly deposited at agreed commercial banks. If the apparent low bid is withdrawn or rejected, the bid documentation of the second low bidder will be examined and inventoried in the manner specified above, then sealed and deposited again in escrow. If the second low bid is withdrawn or rejected, the bid documentation of the third low bidder will be examined and inventoried in the manner specified above, then sealed and deposited again in escrow. Upon execution and final approval of the contract or rejection of all bids, the bid documentation will be returned to any remaining unsuccessful bidders.

The escrowed bid documentation may be examined by the designated representatives of both the Department and the Contractor, at any time deemed necessary by either the Department or the Contractor to assist in the negotiation of price adjustments and change orders, or in the settlement of claims or disputes.

If requested by a Disputes Review Board, the escrowed bid documentation may be utilized to assist the Board in its recommendations.

The bid documentation submitted by the Contractor will be held in escrow until the contract has been completed, the ultimate resolution of all disputes and claims has been achieved and receipt of final payment has been accepted by the Contractor. The escrowed bid documentation will then be released from escrow to the Contractor.

The bid documentation submitted by the bidder is, and shall remain, the property of the bidder, and is subject to only joint review by the Department and the bidder. The Department stipulates and expressly acknowledges that the submitted bid documentation constitutes trade secrets and will not be deemed public records. This acknowledgment is based on the Department's express understanding that the information contained in the bid documentation is not known outside the bidder's business, is known only to a limited extent and only by a limited number of employees of the bidder, is safeguarded while in the bidder's possession, is extremely valuable to the bidder and could be extremely valuable to the bidder's competitors by virtue of it reflecting the bidder's contemplated techniques of The Department acknowledges that the bid documentation includes a construction. compilation of information used in the bidder's business, intended to give the bidder an opportunity to obtain an advantage over competitors who do not know of or use the contents of the documentation. The Department agrees to safeguard the bid documentation, and all information contained therein, against disclosure, including disclosure of subcontractor bid documentation to the Contractor and other subcontractors to the fullest extent permitted by law. However, in the event of arbitration or litigation, the bid documentation shall be subject to discovery, and the Department assumes no responsibility for safeguarding the bid documentation unless the Contractor has obtained an appropriate protective order issued by the arbitrator or the court.

Full compensation for preparing the bid documentation, presenting it for escrow and reviewing it for escrow and upon request of the Engineer shall be considered as included in the contract prices paid for the various items of work, and no additional compensation will be allowed therefor.

The direct cost of depositing the bid documentation in escrow at the agreed commercial bank will be paid by the State.

5-1.17 PARTNERING

The State will promote the formation of a "Partnering" relationship with the Contractor in order to effectively complete the contract to the benefit of both parties. The purpose of this relationship will be to maintain cooperative communication and mutually resolve conflicts at the lowest possible management level.

A one-day "Training in Partnering Concepts" forum will be conducted regardless of whether the Contractor requests the formation of a "Partnering" relationship. The forum will be conducted locally for the Contractor and the Engineer's project representatives. The Contractor shall be represented by a minimum of two representatives, one being the Contractor's authorized representative pursuant to Section 5-1.06, "Superintendence," of the Standard Specifications. If, upon the Contractor's request, "Partnering" is approved by the Engineer, "Training in Partnering Concepts" shall be conducted prior to the "Partnering" workshop. Scheduling of "Training in Partnering Concepts," selection of the Engineer's representatives to participate in "Training of Partnering Concepts," and selection of the partnering concepts trainer and site shall be as determined by the Engineer.

The Contractor may request the formation of a "Partnering" relationship by submitting a request in writing to the Engineer after approval of the contract. If the Contractor's request for "Partnering" is approved by the Engineer, scheduling of a "Partnering" workshop, selecting the "Partnering" facilitator and workshop site, and other administrative details shall be as agreed to by both parties.

The costs involved in providing a trainer and site for the "Training in Partnering Concepts" forum will be borne by the State. The Contractor shall pay all compensation for the wages and expenses of the facilitator and of the expenses for obtaining the workshop site. The State will reimburse the Contractor for these costs as extra work in conformance with the provisions in Section 4-1.03D of the Standard Specifications. Full compensation for the wages and expenses of the Contractor's representatives, including travel costs, shall be considered as included in the contract prices paid for the various items of work and no additional compensation will be allowed therefor.

The costs involved in providing a "Partnering" facilitator and a workshop site will be borne equally by the State and the Contractor. The Contractor shall pay all compensation for the wages and expenses of the facilitator and of the expenses for obtaining the workshop site. The State's share of such costs will be reimbursed to the Contractor in a change order written by the Engineer.

Markups will not be added to the costs of "Training in Partnering Concepts" or the costs of providing a "Partnering" facilitator and workshop site. All other costs associated with the "Partnering" relationship will be borne separately by the party incurring the costs.

The establishment of a "Partnering" relationship will not change or modify the terms and conditions of the contract and will not relieve either party of the legal requirements of the contract.

5-1.22 SOUND CONTROL REQUIREMENTS

Sound control shall conform to the provisions in Section 7-1.01I, "Sound Control Requirements," of the Standard Specifications and these special provisions.

Between the hours of 8:00 p.m. and 8:00 a.m., the noise level from any of the Contractor's operations performed at the San Francisco Anchorage and on the entire superstructure from the San Francisco Anchorage to Pier W2, shall not exceed 86 dBA, Lmax, when measured at a distance of 50 feet from the noise source. requirement shall not apply to placing traffic control. Said noise level requirement shall apply to all equipment on the job or related to the job and all operations, including but not limited to rivet removal, bridge removal, structural steel erection, rigging operations, bolting operations and clean and blast painting operations. The use of loud sound signals shall be avoided in favor of light warnings except those required by safety laws for the protection of personnel. Should the Contractor elect to schedule work between 8:00 p.m. and 8:00 a.m., a written Sound Control Plan (SCP) shall be submitted to the Engineer for review and approval. The SCP shall be submitted at least three weeks in advance of anticipated nighttime work operations. The Contractor shall allow the Engineer two weeks to review and approve the SCP. The Contractor shall allow an additional week for review and approval of any SCP re-submittals or revisions. The SCP shall be prepared and monitored by a noise control specialist, approved by the Engineer. SCP shall include work to be performed, equipment to be used, planned work duration, mitigating measures, noise monitoring procedures and contingency plan if mitigating measures are not effective. Mitigation shall be made at the noise source. Work shall not begin on any nighttime noise operations until the Engineer has approved

Monitoring shall be performed using a Type 1 Sound Level Meter, as specified by the latest ANSI standards, measuring a dynamic range of 40-120 dB. Noise levels shall be A-weighted with a minimum sampling rate of 64 samples per second (Fast). Root Mean Square (RMS) sound pressure levels (SPLs) shall be expressed by the descriptors Lmax and Leq(h). Microphones shall be equipped with windscreens and shall be positioned 50 feet from the noise source as designated by the Engineer. Monitoring shall be performed for a duration of at least 5 minutes during each work operation. Additional spot readings shall be taken as directed by the Engineer to assure the noise level during work operations are within the allowable limits. Noise monitoring equipment shall be calibrated before and after each work shift. The noise monitor shall print data to a serial printer, providing immediate on-site results. The Contractor shall keep a copy of all documentation and submit one copy to the Engineer.

Should the noise level from any work operation performed between the hours of 8:00 p.m. and 8:00 a.m., except when placing and removing traffic control as noted above, exceed the allowable limits of 86 dBA, Lmax, the operation shall cease immediately. Prior to resuming this work, the Contractor shall submit a revised SCP plan detailing new, revised or additional measures to mitigate the noise. The Contractor shall not resume work until the Engineer has approved, in writing, the revised plan.

Noise mitigation measures shall be employed during all hours when rivet removal operations and bolting operations are being performed on the entire superstructure between the San Francisco Anchorage and Pier W2. The Contractor shall furnish and install noise blankets meeting or exceeding the Sound Transmission Class (STC) rating 29 and a noise reduction coefficient (NRC) rating of 0.75. The blankets shall be installed between the noise source and the surrounding buildings. The blankets shall fully surround the work area and equipment used for the work and shall extend a minimum of 12 feet in all directions from the point of noise generation. This requirement may be reduced to 8 feet if the work area is completely enclosed with noise blankets. The blankets shall be in place prior to the commencement of rivet removal and bolting operations. Noise blankets shall be

maintained for cleanliness, be free of graffiti, holes, cracks and tears. The Contractor shall take all measures necessary to secure the noise blankets around the work and prevent them from becoming loose or falling down. Information on suppliers of noise blankets is included in "Material Information", available from the District Duty Senior at (510) 286-5549.

Full compensation for conforming to the requirements of this section shall be considered as included in the prices paid for the various contract items of work involved and no additional compensation will be allowed therefor.

10-1.01 ORDER OF WORK

Order of work shall conform to the provisions in Section 5-1.05, "Order of Work," of the Standard Specifications and these special provisions.

The Contractor's attention is directed to "Obstruction", elsewhere in these special provisions.

The Contractor's attention is directed to the existence of environmental restrictions that require special precautions be taken by the contractor to protect the American peregrine falcon, double-crested cormorants (DCCO), and western gull nesting sites. In addition, this includes the harbor seal haulout on Yerba Buena Island. The harbor seals are protected by the Marine Mammal Protection Act (MMPA). It is the Contractor's responsibility to keep informed of all State and Federal Laws.

The Contractor shall comply with the California Endangered Species Act, the Federal Endangered Species Act, and the Federal Migratory Bird Treaty Act, which govern protection of the nesting sites of peregrine falcon, double crested cormorants (DCCO), and western gull. This includes the Marine Mammal Protection Act (MMPA) which protects the harbor seal haulout on Yerba Buena Island. Prior to the start of work, the Contractor shall provide the Resident Engineer with a proposed work schedule.

A pair of peregrine falcons nest on the west bay spans of the San Francisco/Oakland Bay Bridge (SFOBB). The peregrine falcons will be monitored by the Santa Cruz Predatory Bird Research Group (SCPBRG) during construction between January 1st and July 31st each construction year. If the peregrine falcons nest successfully, the Contractor shall provide access to the nesting site for the SCPBRG biologist to remove the falcon eggs and/or chicks.

DCCO are afforded protection during their annual nesting season under provisions of the Federal Migratory Bird Treaty Act (MBTA). DCCO nesting season extends from March 1st through September 15th. When working on the SFOBB, the Contractor must continuously prevent the DCCO from constructing and completing nests. These preventative measures include daily washing away of the nesting materials and/or excluding the birds from the work areas. Should nests be completed and eggs laid or chicks hatched, work impacting the birds/eggs or nests must cease. Nests, eggs, and chicks may not be removed or destroyed. Adult and chick DCCO must have access to the nests at all times., The DCCO colony will be monitored by the Caltrans staff and/or Point Reyes Bird Observatory seabird biologist(s) during the nesting season.

It is anticipated that western gulls will attempt to nest on the SFOBB, Bridge No. 34-0003, between April 1st and September 30th. If any work is anticipated on said structure during this period, the Contractor shall take such measures as necessary to prevent nesting. Prior to April 1st, existing nests shall be removed or exclusionary devices such as netting installed. After April 1st, partially built nests shall be removed on a daily basis or exclusionary devices such as netting or panels used. If new nests are built or existing nests become occupied, no work that interferes with or discourages gulls from returning to their nests will be permitted. No extension of time nor compensation will be granted for a suspension of work due to nesting birds. Full compensation for preventing nesting shall be considered as included in the prices paid for the various contract items of work involved and no additional compensation will be allowed therefor.

Western gulls attempting to nest on the SFOBB are protected by the MBTA during the aforementioned time period. The MBTA allows the "hazing" and "harassment" of adult birds during the nesting season, but not "harming" them. These actions shall only apply to the adult birds prior to egg laying and chicks hatching. "Haze and "harass" are defined as frightening or scaring the adult birds who are attempting to nest, but not physically harming them. "Harm" is defined as destroying active nests with eggs, physically injuring or killing chicks and/or adults.

Any delays caused by the Contractor's failure to protect work areas from nesting birds will be at his or her expense. It is the Contractor's responsibility to protect the project from known circumstances that could delay the project, or bear the losses from such a delay.

The Contractor is directed to the Environmentally Sensitive Area (ESA), a harbor seal haulout, on the southwest side of Yerba Buena Island. All activities are excluded from the shoreline extending out in a radius of 300 meters from the harbor seal haulout. The harbor seals are protected by MMPA.

Temporary railing (Type K) shall be in place at locations shown on the plans prior to starting any adjacent construction activities.

Full compensation for conforming to the requirements of this section shall be considered as included in the prices paid for the various contract items of work involved and no additional compensation will be allowed therefor.

The first order of work shall be to place the order for the electrical facilities' equipment (seismic retrofit). The Contractor shall furnish the Engineer with a statement from the vendor that the order for said equipment has been received and accepted by said vendor.

The following electrical systems shall not be modified until the replacement system has been installed and fully tested. Temporary system support is permitted only with the Engineer's prior written approval of the Contractor's written temporary support proposal.

- 1. The $15 \mathrm{kV}$ cable system between the Sterling Substation and the Pier W-4 Substation.
- 2. The Bridge phone system between the west bay paint yard to the Pier W-7 splice cabinet.
 - 3. The Beale Street 15kV to 480V conversion system.
 - 4. All Navigational lighting system at each location or subsystem.

The work shall be performed in conformance with the stages of construction shown on the plans. Nonconflicting work in subsequent stages may proceed concurrently with work in preceding stages, provided satisfactory progress is maintained in the preceding stages of construction.

All contract work between Pier W1 and the San Francisco Anchorage except the installation of the viscous dampers shall be diligently pursued to completion on or before September 1, 2000, beginning at 12:01 a.m. on the first working day after contract award. In the event that all contract work between Pier W1 and the San Francisco Anchorage is not completed by September 1, 2000, damage will be sustained by the State of California and it is and will be impracticable and extremely difficult to ascertain and determine the actual damage. It is therefore agreed by the parties that for each and every calendar day's delay in completing all contract work between Pier W1 and the San Francisco Anchorage, the Contractor will pay to the State the sum of \$5200 per day as liquidated damages. The Contractor agrees to pay the liquidated damages herein provided for, and further agrees that the Department may deduct the amount thereof from any moneys due or that may become due the Contractor under the contract.

Replacement of the bearings at Pier W1 shall be completed prior to retrofitting continuous truss chord L0-L1.

The Contractor shall be prepared to provide lane closures as per sections 10-1.12, "Maintaining Traffic," and 10-1.13, "Traffic Control System for Lane Closure," elsewhere in these special provisions within 5 days after award of the contract. If the Contractor fails to provide lane closures within specified time, lane closures will be provided by the State and cost of lane closures will be deducted from the money due to the Contractor.

10-1.05 PROGRESS SCHEDULE (CRITICAL PATH)

Progress schedules will be required for this contract. Progress schedules shall utilize the Critical Path Method (CPM).

Definitions - The following definitions apply to this section "Progress Schedule (Critical Path)":

- 1) Activity: Any task, or portion of a project, which takes time to complete.
- 2) Baseline Schedule: The initial CPM schedule representing the Contractor's original work plan, as accepted by the Engineer.
- Controlling Operation: The activity considered at the time by the Engineer, within that series of activities defined as the critical path, which, if delayed or prolonged, will delay the time of completion of the contract.
- 4) Critical Path: The series of activities which determines the earliest completion of the project (Forecast completion Date). Those activities with float less than or equal to a specified value, often zero.
- 5) Critical Path Method: A mathematical calculation to determine the earliest completion of the project represented by a graphic representation of the sequence of activities that shows the interrelationships and interdependencies of the elements composing a project.
- 6) Current Contract Completion Date: The extended date for completion of the contract shown on the weekly statement of working days furnished by the Engineer in accordance with Section 8-1.06, "Time of Completion," of the Standard Specifications.
- 7) Early Completion Time: The difference in time between the current contract completion date and the Contractor's scheduled early forecast completion date as shown on the accepted baseline schedule, or schedule updates and revisions.
- 8) Float: The amount of time between the early start date and the late start date, or the early finish date and the late finish date, of any activity or group of activities in the network.
- 9) Forecast Completion Date: The completion date of the last scheduled work activity identified on the critical path.
- 10) Fragnet: A section or fragment of the network diagram comprised of a group of activities.
- 11) Free Float: The amount of time an activity can be delayed before affecting a subsequent activity.
- 12) Hammock Activity: An activity added to the network to span an existing group of activities for summarizing purposes.
- Milestone: A marker in a network, which is typically used to mark a point in time or denote the beginning or end of a sequence of activities. A milestone has zero duration, but will otherwise function in the network as if it were an activity.
- Revision: A change in the future portion of the schedule that modifies logic, adds or deletes activities, or alters activities, sequences, or durations.
- 15) Tabular Listing: A report showing schedule activities, their relationships, durations, scheduled and actual dates, and float.
- Total Float: The amount of time that an activity may be delayed without affecting the total project duration of the critical path.
- 17) Update: The modification of the CPM progress schedule through a regular review to incorporate actual progress to date by activity, approved time adjustments, and projected completion dates.

Preconstruction Scheduling Conference - The Engineer will schedule and conduct a Preconstruction Scheduling Conference with the Contractor's Project Manager and Construction Scheduler within seven days after the bidder has received the contract for execution. At this meeting, the requirements of this section of the special provisions will be reviewed with the Contractor. The Contractor shall be prepared to discuss its schedule methodology, proposed sequence of operations, the activity identification system for labeling all work activities, and any deviations it proposes to make from the Stage Construction Plans. The Engineer shall submit a diskette of a scheduling shell project, displaying a generic activity code dictionary consisting of fields populated with the Caltrans Scope Breakdown Structure Code. The Contractor shall utilize these codes, and may add other codes as necessary, to group and organize the work activities.— Periodically the Engineer may request the Contractor to utilize additional filters, layouts or activity codes to be able to further group or summarize work activities.

Also, the Engineer and the Contractor shall review the requirements for all submittals applicable to the contract and discuss their respective preparation and review durations. All submittals are to be reflected on the Interim Baseline Schedule and the Baseline Schedule.

Interim Baseline Schedule - Within 15 days after approval of the contract, the Contractor shall submit to the Engineer an interim baseline project schedule which will serve as the progress schedule for the first 120 days of the project, or until the baseline schedule is accepted, whichever is sooner. The interim baseline schedule shall utilize the critical path method. The interim baseline schedule shall depict how the Contractor plans to perform the work for the first 120 days of the contract. Additionally, the interim baseline schedule shall show all submittals required early in the project, and shall provide for all permits, and other non-work activities necessary to begin the work. The interim baseline schedule submittal shall include a 3 1/2 inch floppy diskette which contains the data files used to generate the schedule.

The Engineer shall be allowed 10 days to review the schedule and to provide comments, including the Contractor's application of the supplied scope breakdown structure. The interim baseline schedule does not require Caltrans approval but all comments are to be implemented into the baseline schedule. Resubmittal of the interim baseline schedule is not required. Late review of the interim baseline schedule shall not restrain the submittal of the baseline schedule.

Baseline Schedule - Within 30 days after approval of the contract, the Contractor shall submit to the Engineer a baseline project schedule including the incorporation of all comments provided to the interim baseline schedule. The baseline project schedule shall have a data date of the day prior to the first working day of the contract and shall not include any completed work to-date. The baseline progress schedule shall meet interim target dates, milestones, stage construction requirements, internal time constraints, show logical sequence of activities, and must not extend beyond the number of days originally provided for in the contract.

The baseline CPM schedule submitted by the Contractor shall have a sufficient number of activities to assure adequate planning of the project and to permit monitoring and evaluation of progress and the analysis of time impacts. The baseline schedule shall depict how the Contractor plans to complete the whole work involved, and shall show all activities that define the critical path.

The baseline progress schedule shall be supplemented with resource allocations for every activity, to a level of detail that facilitates report generation based on labor craft and equipment class for the Contractor and subcontractors. The Contractor shall use average composite crews to display the labor loading of on-site construction activities. The Contractor shall optimize and level labor to reflect a reasonable plan for accomplishing the work of the contract and to assure that resources are not duplicated in concurrent activities. The Contractor shall require each subcontractor to submit in writing a statement certifying that the subcontractor has concurred with the Contractor's CPM, including major updates, and that the subcontractor's related schedule has been incorporated accurately, including the duration of activities and labor and equipment loading. Along with the baseline progress schedule, the Contractor shall also submit to the Engineer time-scaled resource histograms of the labor crafts and equipment classes to be utilized on the contract. The baseline schedule submittal shall include a 3 1/2 inch floppy diskette which contains the data files used to generate the schedule.

The Engineer shall be allowed 15 days to review and accept or reject the baseline project schedule submitted. Rejected schedules shall be resubmitted to the Engineer within 5 days, at which time a new 15 day review period by the Engineer will begin.

Project Schedule Reports - Schedules submitted to the Engineer including baseline and interim baseline schedules shall include time scaled network diagrams in a layout format requested by the Engineer. The network diagrams submitted to the Engineer shall also be accompanied by four computer-generated mathematical analysis tabular reports for each activity included in the project schedule. The reports (8 1/2" x 11" size) shall include a network diagram report showing the activity columns only, a predecessor and successor report, a resource report, and a scheduling and

leveling calculation report. network diagram reports shall include the following for each activity:

- 1) Activity number and description;
- 2) Activity codes;
- 3) Original actual and remaining durations;
- 4) Earliest start date (by calendar date);
- 5) Earliest finish date (by calendar date);
- 6) Actual start date (by calendar date);
- 7) Actual finish date (by calendar date);
- 8) Latest start date (by calendar date);
- 9) Latest finish date (by calendar date);
- 10) Identify activity calendar ID
- 11) Total Float and Free Float, in work days; and
- 12) Percentage of activity complete and remaining duration for incomplete activity.;

Network diagrams shall be sorted and grouped in a format requested by the Engineer reflecting the project breakdown per the Caltrans scope breakdown structure codes. They shall be drafted time scaled to show a continuous flow of information from left to right per the project sorting and grouping. E.g., the schedule, from top to bottom, shall be grouped by project milestones, submittals subgrouped by description, and the construction activities subgrouped by the scope breakdown structure. The primary paths of criticality shall be clearly and graphically identified on the networks. The network diagram shall be prepared on E-size sheets (36" x 48"), shall have a title block in the lower right-hand corner, and a timeline on each page. Exceptions to the size of the network sheets and the use of computer graphics to generate the networks shall be subject to the approval of the Engineer.

Schedule network diagrams and the tabular reports shall be submitted to the Engineer for acceptance in the following quantities:

- a) 2 sets of the Network Diagrams;
- b) 2 copies of the tabular reports (8 1/2" x 11" size); and
- c) 3 computer diskettes.

Should the baseline schedule or schedule update, submitted for acceptance, show variances from the requirements of the contract, the Contractor shall make specific mention of the variations in the letter of transmittal, in order that, if accepted, proper adjustments to the project schedule can be made. The Contractor will not be relieved of the responsibility for executing the work in strict accordance with the requirements of the contract documents. In the event of a conflict between the requirements of the contract documents and the information provided or shown on an accepted schedule, the requirements of the contract documents shall take precedence.

Each schedule submitted to the Engineer shall comply with all limits imposed by the contract, with all specified intermediate milestone and completion dates, and with all constraints, restraints or sequences included in the contract. The degree of detail shall include factors including, but not limited to:

- 1) Physical breakdown of the project;
- 2) Contract milestones and completion dates, substantial completion dates, constraints, restraints, sequences of work shown in the contract, the planned substantial completion date, and the final completion date;
- Type of work to be performed, the sequences, and the major subcontractors involved;
- 4) All purchases, submittals, submittal reviews, manufacture, tests, deliver, and installation activities for all major materials and equipment.
- 5) Preparation, submittal and approval of shop and working drawings and material samples, showing time, as specified elsewhere, for the Engineer's review. The same time frame shall be allowed for at least one resubmittal on all major submittals so identified in the contract documents;
- 6) Identification of interfaces and dependencies with preceding, concurrent and follow-on contractors, railroads, and utilities as shown on the plans or specified in the specifications;
- 7) Identification of each and every utility relocation and interface as a separate activity, including activity description and responsibility coding that identifies the type of utility and the name of the utility company involved
- 8) Actual tests, submission of test reports, and approval of test results;
- 9) All start-up, testing, training, and assistance required under the Contract;
- 10) Punchlist and final clean-up;
- 11) Identification of any manpower, material, or equipment restrictions, as well as any activity requiring unusual shift work, such as double shifts,

- $6\text{-}\mathrm{day}$ weeks, specified overtime, or work at times other than regular days or hours; and
- 12) Identification of each and every ramp closing and opening event as a separate one-day activity, including designation by activity coding and description that it is a north-bound, south-bound, east-bound, west-bound, and entry or exit ramp activity.

Each construction activity shall have a duration of not more than 20 working days, and not less than one working day unless permitted otherwise by the Engineer. All activities in the schedule, with the exception of the first and last activities, shall have a minimum of one predecessor and a minimum of one successor. The baseline schedule shall not attribute negative float to any activity. Float shall not be considered as time for the exclusive use of or benefit of either the State or the Contractor but shall be considered as a jointly owned, expiring resource available to the project and shall not be used to the financial detriment of either party. The Contractor shall not add job inefficiencies or weather days to a project calendar without prior approval by the Engineer. Any accepted schedule, revision or update having an early completion date shall show the time between the early completion date and the current Contract Completion Date as "project float".

The Contractor shall be responsible for assuring that all work sequences are logical and the network shows a coordinated plan for complete performance of the work. Failure of the Contractor to include any element of work required for the performance of the contract in the network shall not relieve the Contractor from completing all work within the time limit specified for completion of the contract. If the Contractor fails to define any element of work, activity or logic, and the omission or error is discovered by either the Contractor or the Engineer, it shall be corrected by the Contractor at the next monthly update or revision of the schedule.

Weekly Schedule Meetings - The Engineer and the Contractor shall hold weekly scheduling meetings to discuss the near term schedule activities, to address any long-term schedule issues, and to discuss any relevant technical issues. The Contractor shall develop a rolling 3-week schedule identifying the current week and a 2-week look ahead. It shall provide_sufficient detail to address all activities to be performed and to identify issues requiring engineering action or input. Also, the_Engineer shall maintain a critical item list identifying each issue, the project impact, the responsible party, and a scheduled resolution date. The list shall be developed with input from the Contractor and shall prioritize each issue in order to mitigate any schedule or cost impact to the project.

Monthly Update Schedules - The Contractor shall submit a Monthly Update Schedule to the Engineer once in each month. The proposed update schedule prepared by the Contractor shall include all information available as of the 20th calendar day of the month, or other date as established by the Engineer. A detailed list of all proposed schedule changes such as logic, duration, lead/lag, forecast completion date, additions and deletions shall be submitted with the update.

The monthly update schedule submitted to the Engineer shall be accompanied by a Schedule Narrative Report. The Schedule Narrative Report shall describe the physical progress during the report period, plans for continuing the work during the forthcoming report period, actions planned to correct any negative float, and an explanation of potential delays or problems and their estimated impact on performance, milestone completion dates, forecast completion date, and the overall project completion date. In addition, alternatives for possible schedule recovery to mitigate any potential delay or cost increases shall be included for consideration by the Engineer. The report shall follow the outline set forth below:

Contractor's Schedule Narrative Report Outline:

- 1) Contractor's Transmittal Letter
- 2) Work completed during the period
- 3) Description of the current critical path
- 4) Description of problem areas
- 5) Current and anticipated delays
 - a) Cause of the delay
 - b) Corrective action and schedule adjustments to correct the delay
 - c) Impact of the delay on other activities, milestones, and completion dates
- 6) Changes in construction sequences
- 7) Pending items and status thereof
 - a) Permits
 - b) Change Orders
 - c) Time Extensions
 - d) Non-Compliance Notices
- 8) Contract completion date(s) status
 - a) Ahead of schedule and number of days
 - b) Behind schedule and number of days

9) Include updated Network Diagram and Reports

The Contractor shall provide to the Engineer a 31/2" electronic disk of the schedule, together with printed copies of the network diagrams and tabular reports described under "Project Schedule Reports", and the Schedule Narrative Report.

The monthly update of the schedule shall be for the period from the last update to the current cut-off date, and for the remainder of the project. The current period's activities shall be reported as they actually took place and designated as actually complete, if actually completed, in the schedule updates.

Portions of the network diagram on which all activities are complete need not be reprinted and submitted in subsequent updates. However, the electronic disk file of the submitted schedule and the related reports shall constitute a clear record of progress of the work from award of contract to final completion.

The Contractor will be permitted to show a forecast completion date on the schedule updates and revisions. The Engineer may use the updates and revisions, and other information available, in evaluating the effect of changes, delays, or time savings on the critical path and the accepted schedule current at the time to determine if there is an applicable adjustment of time, if any, to any target date or completion date due to the changes, delays, or time savings.

On a date determined by the Engineer, the Contractor shall meet with the Engineer to review the monthly schedule update. At the monthly progress meeting, the Contractor and the Engineer will review the updated schedule and will discuss the content of the Narrative Report. The Engineer shall be allowed 15 days after the meeting to review and accept or reject the update schedule submitted. Rejected schedules shall be resubmitted to the Engineer within 10 days, at which time a new 7 day review period by the Engineer will begin. All efforts shall be made between the Engineer and the Contractor to complete the review and the approval process prior to the next update schedule cutoff date. To expedite the process a second meeting between the Engineer and the Contractor shall be held.

Schedule Revisions - If the Contractor desires to make a change to the accepted schedule, the Contractor shall request permission from the Engineer in writing, stating the reasons for the change, and proposed revisions to activities, logic and duration. The Contractor shall submit for acceptance an analysis showing the effect of the revisions on the entire project. The analysis shall include:

- An updated schedule not including the revisions. The schedule shall have a data date just prior to implementing the proposed revisions and include a project completion date;
- 2. A revised schedule that includes the proposed revisions. The schedule shall have the same data date as the updated schedule and include a project completion date;
- A narrative explanation of the revisions and their impact to the schedule;
- 4. Computer files of the updated and revised schedules.

The Engineer will provide a response within 10 days. No revision to the accepted baseline schedule or the schedule updates shall be made without the prior written approval of the Engineer.

The Engineer will request the Contractor to submit a proposed revised schedule within 15 days when:

- a) there is a significant change in the Contractor's operations that will affect the critical path;
- b) the current updated schedule indicates that the contract progress is 30 days or more behind the planned schedule, as determined by the Engineer; or
- c) the Engineer determines that an approved or anticipated change will impact the critical path, milestone or completion dates, contract progress, or work by other contractors.

The Engineer shall be allowed 15 days to review and accept or reject a schedule revision. Rejected schedule revisions shall be revised and resubmitted to the Engineer within 15 days, at which time a new 15 day review period by the Engineer will begin. Only upon approval of a change by the Engineer shall it be reflected in the next schedule update submitted by the Contractor.

Schedule Time Extension Requests - When the Contractor requests a time extension due to contract change orders or delays, the Contractor shall submit to the Engineer a written Time Impact Analysis illustrating the influence of each change or delay on the current contract completion date or milestone completion date, utilizing the

current accepted schedule. Each Time Impact Analysis shall include a fragnet demonstrating how the Contractor proposes to incorporate the Change Order or delay into the current schedule. The fragnet shall include the sequence of new and existing activity revisions that are proposed to be added to the accepted baseline project schedule or current schedule in effect at the time the change or delay is encountered, to demonstrate the influence of the delay and the proposed method for incorporating the delay and its impact into the schedule.

Each Time Impact Analysis shall demonstrate the estimated time impact based on the events of delay, the anticipated or actual date of the contract change order work performance, the status of construction at that point in time, and the event time computation of all activities affected by the change or delay. The event times used in the analysis shall be those included in the latest update of the current schedule in effect at the time the change or delay was encountered.

Time extensions will be granted only to the extent that equitable time adjustments for the activity or activities affected exceed the total or remaining float along the critical path of activities at the time of actual delay, or at the time the contract change order work is performed. Float time is not for the exclusive use or benefit of the Engineer or the Contractor, but is an expiring resource available to all parties as needed to meet contract milestones and the contract completion date. Time extensions will not be granted nor will delay damages be paid unless:

- a) the delay is beyond the control and without the fault or negligence of the Contractor and its subcontractors or suppliers, at any tier; and,
- b) the delay extends the actual performance of the work beyond the applicable current contract completion date and the most recent date predicted for completion of the project on the accepted schedule update current as of the time of the delay or as of the time of issuance of the contract change order.

Time Impact Analyses shall be submitted in triplicate within 15 days after the delay occurs or after issuance of the contract change order.

Approval or rejection of each Time Impact Analysis by the Engineer will be made within 15 days after receipt of the Time Impact Analysis, unless the review is delayed by subsequent meetings and negotiations. A copy of the Time Impact Analysis approved by the Engineer shall be returned to the Contractor and the accepted schedule revisions illustrating the influence of the contract change orders or delays shall be incorporated into the project schedule during the first update after approval.

Final Schedule Update - Within 15 days after the acceptance of the contract by the Director, the Contractor shall submit a final update of the schedule with actual start and actual finish dates for all activities. This schedule submission shall be accompanied by a certification, signed by an officer of the company and the Contractor's Project Manager stating "To the best of my knowledge, the enclosed final update of the project schedule reflects the actual start and completion dates of the activities contained herein."

Equipment and Software - The Contractor shall provide for the State's exclusive possession and use a complete computer system specifically capable of creating, storing, updating and producing CPM schedules. Before delivery and setup of the computer system, the Contractor shall submit to the Engineer for approval a detailed list of all computer hardware and software the Contractor proposes to furnish. The minimum computer system to be furnished shall include the following:

- Complete computer system, including keyboard, mouse, 17 inch color SVGA monitor (1,024x768 pixels), Intel Pentium 266 MHz micro processor chip, or equivalent, or better;
- 2) Computer operating system software, compatible with the selected processing unit, for Windows 95 98 or later, or equivalent;
- 3) Minimum sixty-four (64) megabytes of random access memory (RAM);
- 4) A 3.2 gigabyte minimum hard disk drive, a 1.44 megabyte 3 1/2 inch floppy disk drive, 32x speed minimum CD-ROM drive, Ethernet card and 56 k modem;
- 5) A color-ink-jet plotter with a minimum 8 36 megs RAM, capable of 300 dots per inch color, 600 dots per inch monochrome, or equivalent plotter capable of printing fully legible, timescaled charts, and network diagrams, in four

colors, with a minimum size of 36 inches by 48 inches (E size) and is compatible with the selected system. All required plotter paper and ink cartridges throughout the contract; and

- 6) CPM software shall be Primavera Project Planner, the latest version 2.0 for Windows 95, or later; and
- 7) Schedule Analyzer Pro- a software to compare two different Primavera schedule updates to analyze their similarities and differences. The latest version for Windows 95, or later.

The computer hardware and software furnished shall be compatible with that used by the Contractor for the production of the CPM progress schedule required by the Contract, and shall include original instruction manuals and other documentation normally provided with the software.

The Contractor shall furnish, install, set up, maintain and repair the computer hardware and software ready for use at a location determined by the Engineer. The hardware and software shall be installed and ready for use by the first submission of the baseline schedule. The Contractor shall provide 24 hours of formal training for the Engineer, and three other agents of the department designated by the Engineer, in the use of the hardware and software to include schedule analysis, reporting, and resource and cost allocations. The training shall be performed by an authorized vendor of Project Primavera Project Planner software and shall be completed not more than 30 days after approval of the contract.

All computer hardware and software furnished shall remain the property of the Contractor and shall be removed by the Contractor upon acceptance of the contract when no claims involving contract progress are pending. When claims involving contract progress are pending, computer hardware or software shall not be removed until the final estimate has been submitted to the Contractor.

Payment - Progress schedule (critical path) will be paid for at a lump sum price. The contract lump sum price paid for progress schedule (critical path) shall include full compensation for furnishing all labor, materials (including computer hardware and software), tools, equipment, and incidentals; and for doing all the work involved in preparing, furnishing, updating and revising CPM progress schedules; maintaining and repairing the computer hardware; and training the Engineer in the use of the computer hardware and software; as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

Payments for progress schedule (critical path) will be made as follows:

Interim baseline schedule accepted, then 10 percent payment for progress schedule (critical path) will be made.

Baseline schedule accepted, then 10 percent payment for progress schedule (critical path) will be made.

Monthly update schedules accepted, then 75 percent payment for progress schedule (critical path) will be made equally for each update.

Final schedule update accepted, then 5 percent payment for progress schedule (critical path) will be made.

The Department will retain an amount equal to 25 percent of the estimated value of the work performed during the first estimate period in which the Contractor fails to submit an interim baseline, baseline, revised or updated CPM schedule conforming to the requirements of this section, as determined by the Engineer. Thereafter, on subsequent successive estimate periods the percentage the Department will retain will be increased at the rate of 25 percent per estimate period in which acceptable CPM progress schedules have not been submitted to the Engineer. Retention's for failure to submit acceptable CPM progress schedules shall be additional to all other retention's provided for in the contract. The retention for failure to submit acceptable CPM progress schedules will be released for payment on the next monthly estimate for partial payment following the date that acceptable CPM progress schedules are submitted to the Engineer.

The adjustment provisions in Section 4-1.03, "Changes," of the Standard Specifications, shall not apply to the item of progress schedule (critical path). Adjustments in compensation for the project schedule will not be made for any increased or decreased work ordered by the Engineer in furnishing project schedules.

10-1.06 ELECTRONIC MOBILE DAILY DIARY SYSTEM DATA DELIVERY

Attention is directed to Sections 5-1.10, "Equipment and Plants," and 7-1.01A(3), "Payroll Records," of the Standard Specifications, and these special provisions.

The Contractor shall submit to the Engineer a list of each piece of equipment and its identifying number, type, make, model and rate code in accordance with the Department of Transportation publication entitled "Labor Surcharge and Equipment Rental Rate" which is in effect on the date the work is performed, and the names, labor rates and work classifications for all field personnel employed by the Contractor and all subcontractors in connection with the public work, together with such additional information as is identified below. This information shall be updated and submitted to the Engineer weekly through the life of the project.

This personnel information will only be used for this mobile daily diary computer system and it will not relieve the Contractor and subcontractors from all the payroll records requirements as required by Section 7-1.01A(3), "Payroll Records," of the Standard Specifications.

The Contractor shall provide the personnel and equipment information not later than 11 days after the contract award for its own personnel and equipment, and not later than 5 days before start of work by any subcontractor for the labor and equipment data of that subcontractor.

The minimum data to be furnished shall comply with the following specifications:

Data Content Requirements. --

1. The Contractor shall provide the following basic information for itself and for each subcontractor that will be used on the contract:

```
Company name.
                                    Alphanumeric; up to 30 characters.
Federal tax ID
                                    Alphanumeric; up to 10 characters.
State contractor license
                                    Alphanumeric; up to 20 characters.
                                    Alphanumeric; up to 10 characters.
Company type (prime or sub)
Address (line 1).
                                    Alphanumeric; up to 30 characters.
Address (line 2).
                                    Alphanumeric; up to 30 characters.
Address (city).
                                    Alphanumeric; up to 30 chars.
Address (2-letter state code).
                                    Alphanumeric; up to 2 characters.
Address (zip code)
                                    Alphanumeric; up to 14 characters.
Contact name.
                                    Alphanumeric; up to 30 characters
                                    Alphanumeric; up to 20 characters.
Telephone number (with area code).
                                    Alphanumeric; up to 10 characters.
Company code: short company name.
Type of work (Department-supplied
                                    Alphanumeric; up to 30 characters
 codes)
DBE status (Department-supplied
                                    Alphanumeric; up to 20 characters.
 codes)
Ethnicity for DBE status
                                    Alphanumeric; up to 20 characters.
 (Department-supplied codes).
List of laborers to be used on
 this contract (detail specified
 below).
List of equipment to be used on
 this contract (detail specified
 below).
```

For example, one such set of information for a company might be:

```
XYZ CONSTRUCTION, INC. 94-2991040 AL1649T
```

SUB
1240 9TH STREET
SUITE 600
OAKLAND
CA
94612

```
JOHN SMITH
(510) 834-9999
XYZ
PAVING
MBE
BLACK
```

2. The Contractor shall provide the following information for each laborer who will be used on the contract:

```
Company code (as defined above).
                                    Alphanumeric; up to 10 characters.
                                    Alphanumeric; up to 10 characters.
Employee ID
Last name.
                                    Alphanumeric; up to 20 characters.
                                    Alphanumeric; up to 15 characters.
First name.
Middle name.
                                    Alphanumeric; up to 15 characters.
Suffix
                                    Alphanumeric; up to 15 characters
Labor trade (Department-provided
                                    Alphanumeric; up to 10 characters.
 codes).
Labor classification (Department-
                                    Alphanumeric; up to 10 characters.
 provided codes).
Regular hourly rate.
                                    Alphanumeric; up to (6,2)
Overtime hourly rate.
                                    Alphanumeric; up to (6,2)
Doubletime hourly rate
                                    Alphanumeric; up to (6,2)
Standby hourly rate.
                                    Alphanumeric; up to (6,2)
Ethnicity (Department-provided
                                    Alphanumeric; up to 20 characters.
 codes).
Gender.
                                    Alphanumeric; up to 1 characters.
```

For example, one such set of information might be:

XYZ
1249
GONZALEZ
HECTOR
VINCENT
JR.
OPR
JNY
22.75
30.25
37.75
0.00
HISPANIC

3. The Contractor shall provide the following information for each piece of equipment that will be used on the contract:

Company code (as defined above). Alphanumeric; up to 10 characters. Alphanumeric; up to 10 characters. Company's equipment ID number. Alphanumeric; up to 60 characters. Company's equipment description. Equipment type (from Department Alphanumeric; up to 60 characters. ratebook). Equipment make (from Department Alphanumeric; up to 60 ratebook). characters. Equipment model (from Department Alphanumeric; up to 60 characters. ratebook). Equipment rate code (from Alphanumeric; up to 10 characters Department ratebook). Regular hourly rate. Alphanumeric; up to (6,2) Alphanumeric; up to (6,2) Overtime hourly rate. Standby hourly rate Alphanumeric; up to (6,2) Idle hourly rate. Alphanumeric; up to (6,2) Rental flag. Alphanumeric; up to 1 character.

For example, one such set of information might be:

XYZ B043 CAT TRACTOR D-6C TRACC CAT D-6C 3645 28.08 25.27 14.04 0.00

Data Delivery Requirements. --

- 1. All data described in "Data Requirements" of this section shall be delivered to the Department electronically, on 3 1/2" floppy disks compatible with the Microsoft Windows operating system. The Contractor shall provide a weekly disk and hard copy of the required correct updated personnel and equipment information for the Contractor and all the subcontractors and verified correct by the Engineer.
- 2. Data of each type described in the previous section (contractor, labor, and equipment information) will be delivered separately, each type in one or more files on floppy disk. Any given file may contain information from one contractor or from multiple contractors, but only one type of data (contractor, labor, or equipment information).
- 3. The file format for all files delivered to Caltrans shall be standard commadelimited, plain text files. This type of file (often called "CSV") is the most standard type for interchange of formatted data; it can be created and read by all desktop spreadsheet and desktop database applications. Characteristics of this type of file are:
 - All data is in the form of plain ASCII characters.
 - Each row of data (company, person, equipment) is delimited by a carriage return character.
 - · Within rows, each column (field) of data is delimited by a comma character.
- 4. The files shall have the following columns (i.e., each row shall have the following fields):
 - Contractor info: 15 columns (fields) as specified in "Data Requirements #1", above.
 - Labor info: 14 columns (fields) as specified in "Data Requirements #2", above.
 - Equipment info: 12 columns (fields) as specified in "Data Requirements #3", above.

For each type of file, columns (fields) must be in the order specified under "Data Requirements", above. All columns (fields) described under "Data Requirements" must be present for all rows, even if some column (field) values are empty. The first row of each file may contain column headers (in plain text) rather than data, if desired.

- 5. Column (field) contents must conform to the data type and length requirements described in the "Data Requirement" section, above. In addition, column (field) data must conform to the following restrictions:
 - All data shall be uppercase.
 - Company type shall be either "PRIME" or "SUB".
 - Labor trade and classification codes must conform to a list of standard codes that will be supplied by Department.
 - Contractor type of work codes and DBE status codes must conform to a list of standard codes that will be supplied by Department.
 - Ethnicity codes must conform to standard codes that will be supplied by Department.
 - Data in the "gender" column must be either "M" or "F".
 - Data in the "rental equipment" column must be either "Y" or "N".

- Equipment owner's description may not be omitted. (The description, together with the equipment number, is how the equipment will be identified in the field.) Include manufacturer, rated capacity & trade description
- Equipment type, make, model, and ratebook code shall conform to the Department of Transportation Publication entitled "Labor Surcharge and Equipment Rental Rate", which is in effect on the date the work is performed. If the equipment in question does not have an entry in the book then alternate, descriptive entries may be made in these fields as directed by the Engineer.
- 6. The name of each file must indicate its contents, e.g., "XYZlab.csv" for laborers from XYZ Company, Inc. Each floppy disk supplied to Caltrans must be accompanied by a printed list of the files it contains with a brief description of the contents of each file.

PAYMENT.-- Payment for providing electronic mobile daily diary computer system data delivery will be made on a lump sum basis. The lump sum bid price for electronic mobile daily diary computer system data delivery will be made according to the following schedule:

The Contractor will receive not more than 3.125 per cent per month of the total bid price for electronic mobile daily diary computer system data delivery .

After the completion of the work, 100 per cent payment will be made for electronic mobile daily diary computer system data delivery less the permanent deduction, if any, for failure to deliver complete weekly electronic mobile daily diary computer system data in each month.

The contract lump sum price paid for electronic mobile daily diary computer system data delivery shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in electronic mobile daily diary computer system data delivery as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

The Department will retain an amount equal to 25 percent of the estimated value of the work performed during the first estimate period in which the Contractor fails to submit electronic mobile daily diary computer system data delivery conforming to the requirements of this section, as determined by the Engineer. Thereafter, on subsequent successive estimate periods the percentage the Department will retain will be increased at the rate of 25 percent per estimate period in which acceptable electronic mobile daily diary computer system data have not been submitted to the Engineer. Retentions for failure to submit acceptable electronic mobile daily diary computer system data shall be additional to all other retentions provided for in the contract. The retention for failure to submit acceptable electronic mobile daily diary computer system data will be released for payment on the next monthly estimate for partial payment following the date that acceptable electronic mobile daily diary computer system data is submitted to the Engineer.

The adjustment provisions in Section 4-1.03, "Changes," of the Standard Specifications, shall not apply to the item of electronic mobile daily diary computer system data delivery. Adjustments in compensation for electronic mobile daily diary computer system data delivery will not be made for any increased or decreased work ordered by the Engineer in furnishing electronic mobile daily diary computer system data.

10-1.22B RELOCATE/MODIFY MISCELLANEOUS FACILITIES

This work consists of resetting, relocating/modifying and where necessary reconstructing existing miscellaneous facilities that interfere with the retrofit work as shown on the structure plans. Where necessary, miscellaneous facilities shall be temporarily supported during the retrofit work until they are reinstalled to the retrofitted structure.

The types of existing miscellaneous facilities to be relocated/modified shall consist of, but not be limited to, the following:

Work platforms, platform railing and pipe hangers Barrier Ladder Utility outlet stations Utility cabinet Curb and sidewalk Cover plates Air lines Water lines Navigation equipment Seismic monitoring equipment Conduits Deck expansion floor joints Drain pipe modifications Wharf hydrant modifications Traveler support modifications

Existing miscellaneous facilities are shown on the structure plans, as-built plans or as-built shop drawings.

Unless otherwise shown on the plans, new miscellaneous facilities connections shall be at least equal in strength to the existing connections as approved by the Engineer. New steel components for steel connections shall conform to the requirements in "Steel Structures" elsewhere in these special provisions. New steel components for concrete connections shall conform to the requirements in Section 75, "Miscellaneous Metal," of the Standard Specifications. Existing miscellaneous facilities shall be protected from damage during relocation/modification. Facilities damaged due to the Contractor's operations shall be repaired to original condition as approved by the Engineer at the Contractor's expense.

For each type of facility to be relocated/modified and two weeks before facility relocation/modification work begins, the Contractor shall submit to the Engineer for approval а facility relocation/modification plan. The facility relocation/modification plan shall show details, materials, method and equipment to be used for the relocation/modification of each facility. The facility relocation/modification plan shall include working drawings and design calculations for the proposed method of temporarily supporting the facilities and reinstalling the facilities to the retrofitted member and all new metal components and attachment hardware as necessary for connection to the retrofitted structure. The facility relocation/modification plan submittal shall be in accordance with the provisions in Section 5-1.02, "Plans and Working Drawings," of the Standard Specifications. Facility relocation/modification work shall not begin until the Contractor's facility relocation/modification plan has been approved by the Engineer.

All work involved in relocating/modifying existing miscellaneous facilities shown on the structure plans, as-built plans or as-built working drawings shall be considered as included in the various items of work involved and no additional compensation will be allowed therefor.

All work involved in relocating/modifying existing miscellaneous facilities not shown on the structure plans, as-built plans or as-built working drawings shall be

directed by the Engineer and will be paid for as extra work as provided in Section 4-1.03D of the Standard Specifications.